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EXHIBIT NO. CC 69

May 16, 2013

City Council City of Sammamish 801 228<sup>th</sup> Ave SE Sammamish, WA 98075

## **RE: Environmentally Critical Areas Ordinance (ECA)**

Dear Council Members:

The following comments are provided in support of my request that at the very least the Council maintain the Erosion Hazards Near Sensitive Water Bodies (EHNSWB) regulations as they currently exist and largely reject the proposals for the establishment of the so-called pilot programs in critical areas. Protection of our sensitive slopes, wetlands, streams, and water bodies are critical to the maintenance of our living environment and its fish and wildlife for the benefit of all the residents of Sammamish and myself in particular.

I have lived on a small farm on Ebright Creek for 40 years where I have raised my children and now enjoy my grandchildren. My home was built in 1936 and is situated 20-feet from Ebright Creek. To say I am intimately familiar with Ebright Creek and its environs is an understatement - - - Ebright Creek is a part of me.

Professionally, I have a doctorate in Fisheries from the University of Washington, I am a Certified Fisheries Biologist of the American Fisheries Society, a Fellow of the American Institute of Fishery Research Biologists, and I have conducted research on the ecology of mountain trout streams. Thus, I feel I am qualified to provide a professional opinion on the importance of the ECA and the EHNSWB in particular in protecting the creeks that flow into Lake Sammamish, particularly Ebright Creek, and their fauna and environment.

Over the years that I have lived on Ebright Creek I have noticed slow adverse changes in the ecology and hydrology of the creek. Algal growth appears to be more pronounced suggesting enrichment of the creek water from runoff. Also flooding events have been more numerous during the winter months and on three occasions Ebright Creek has gone over its bank and flooded my home and property.

Of particular concern has been several catastrophic, creek-blocking slides which severely damaged Ebright Creek and impacted my property. The most recent slide in March 2011 was in the form of a large mud slide downstream from the Chestnut Estates development. This slide all but eliminated the eggs and developing fry from

the 2010/2011 kokanee spawning run as verified by King County from the results of the fry trapping by Trout Unlimited at the mouth of the creek.

As can be seen in Figures 1 and 2 attached, this extensive slide came down an arroyo on the eastside of Ebright Canyon. It flowed across Ebright Creek to the westside canyon wall and completely blocked the creek. When the small lake that formed behind the slide broke through, it sent a torrent of mud-laden water down Ebright Creek which smothered the developing eggs from the 2010/2011 kokanee spawning run along the entire creek (Figure 3).

This tragic loss of the entire natural production from that year-class of kokanee underscores the importance of maintaining the existing protections of the steep slopes and watershed of Ebright Creek, as well as the watersheds of Zaccuse, Pine Lake and Laughing Jacobs Creeks which drain into Lake Sammamish and provide important spawning habitat for our endangered kokanee salmon.

It is noteworthy that these large "blow out" slides have occurred since the onset of housing developments on the eastside of the Ebright Canyon along 2012th Ave SE. In the 30 years prior to these housing developments, no major slides were reported nor did I observe any. I don't believe this is a mere coincidence. To the contrary this timeline strongly suggests that the complete removal of the forest cover and subsequent runoff from these developments along 212th SE contributed to these major slides and the subsequent damage to the creek and its fish and other fauna, and my property. Moreover, this cause and effect suggests that the current ECA restrictions on sensitive slopes need to be tightened up, not relaxed, as some would suggest.

## **Culvert Replacement**

I have been an active member of the Kokanee Working Group (KWG), an ad-hoc collaborative group formed in 2007 to prevent the extinction and improve the health of our native kokanee salmon. At the outset the KWG identified a number of probable causes for the decline of the Lake Sammamish kokanee. It was determined that an old blocking culvert in Ebright Creek adjacent to my home should be removed as a remedial measure to enhance access for kokanee and other salmonids to good spawning habitat upstream (Figures 4).

Public funds were not available for this project so last summer I personally took on the responsibility for the removal of this blocking culvert and replacing it with a fish-friendly box culvert. It took more than half a year to complete the design, permitting and removal/installation of a new 40,000-pound, 15-foot wide box culvert at a cost in excess of \$175,000 (Figure 6 and 7).

This culvert/replacement was fortuitous as this past winter Ebright Creek had a strong spawning run of kokanee. More than half the kokanee spawned upstream from the culvert with the length of the creek utilized for spawning increased by some 300% (Figure 8). The results from this enhancement of stream access greatly exceeded expectations. Had this new culvert not been in place, superimposition of

spawning redds would have been extensive, greatly reducing the likelihood of spawning success.

## **Zaccuse Creek**

Just south of the Louis Thompson Road and north of Ebright Creek is a smaller stream, Zaccuse Creek. This creek supported a run of kokanee salmon when I moved to this area in 1973. Unfortunately, a poorly planned and executed housing development in the mid-70s, severely impacted Zaccuse Creek with sediment. In the ensuing years this kokanee run was extirpated.

The KWG has indentified the rehabilitation of the Zaccuse Creek kokanee run as an important future enhancement project. Accordingly, I purchased the land embracing the lower reaches of the creek to insure that these lands will be protected from development and available for rehabilitation. To move this enhancement project forward and in consultation with KWG, I contracted with R2 Resource Consultants in Redmond to conduct a reach analysis of the creek to identify possible projects to improve fish passage on Zaccuse Creek and open new habitat for kokanee spawning in the creek. Last fall some kokanee strayed into the lower reaches of the creek below a blocking culvert so we are optimistic that with improved fish passage and rehabilitation of the creek, this kokanee run can be reestablished.

## **Going forward**

The KWG and myself personally are committed to moving projects forward as funds become available so as to reverse the decline of the native Lake Sammamish kokanee and rebuild the run to the point where the population will once again support a recreational fishery and enhance those faunal elements that prey on kokanee. The remarkable success of the Ebright culvert replacement demonstrates conclusively that with proper watershed protections and collaborative efforts rehabilitation of our kokanee can become a reality.

Unfortunately, the success of our collaborative endeavors, including my culvert replancement, will be for naught if the watersheds of the important kokanee spawning streams and the streams themselves are not protected. As recent slides in Ebright Canyon and the severe sedimentation of Zaccuse Creek have clearly demonstrated, these natural runs of kokanee salmon face a precarious situation. These challenges to the survival of our kokanee will only increase with further development and climate change. The fate of our iconic Little Red Fish rests in large measure in the hands of those who control and manage development in the watersheds of our creeks that flow into Lake Sammamish.

The City of Sammamish and the City Council in particular hold the key to the sustainability of the Lake Sammamish kokanee populations. For that reason I recommend that the ECA be left intact and allowed to continue to provide protections to our sensitive areas. But should the Council in its wisdom deem it

appropriate to make certain changes, I strongly urge the Council to exercise extreme caution in making any changes to the ECA and in particular the EHNSWB.

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I am particularly concerned about the proposed "pilot projects" to allow experimental developments in sensitive steep slope areas. Given the risks involved, this is pure folly and playing with fire. Are the individuals proposing these "pilot projects" prepared to take full financial and environmental responsibility for these experiments should they fail? The down-slope and downstream property owners and citizens of Sammamish should not have to incur the costs of the mistakes of these development proposals.

If the Council should decide to proceed with some type of experimental program, it should be very limited in scope, fully monitored such that impacts can be indentified and quantified, and bonded such that any damages are properly compensated and corrected. Furthermore, any experimental project should be selected pursuant to an RFP approved by the Council. And most importantly NO projects should be allowed in the sub-basins of the major westside spawning creeks, i.e. Ebright, Zaccuse, Pine Lake and Laughing Jacobs Creeks.

I greatly appreciate the hard work by the City staff and Planning Commission on the review of the ECA. I also greatly appreciate the opportunity to make my concerns knows to the Council and trust that a proper decision will be rendered on this important matter.

Very truly yours,

Wally Pereyra

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Figure 1: Major blow-out slide of an arroyo on the eastside of Ebright Canyon, March 2011.

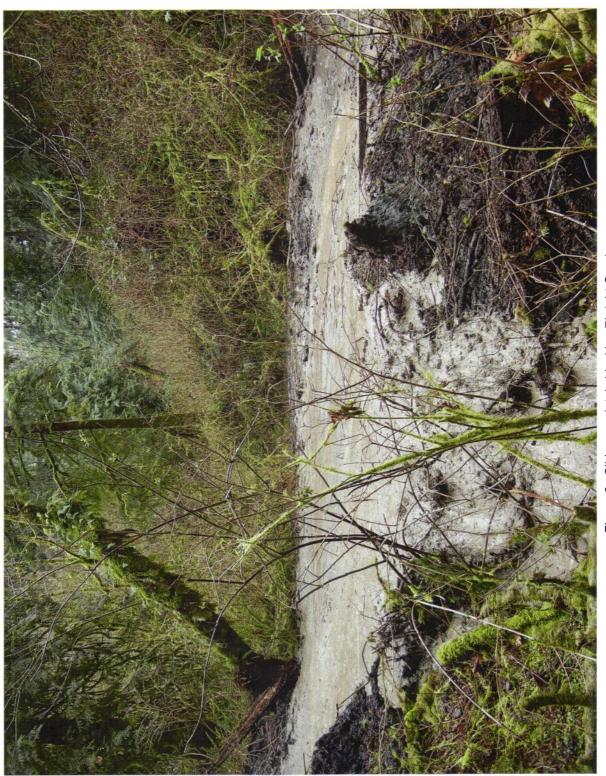


Figure 2: Slide completely blocking Ebright Creek

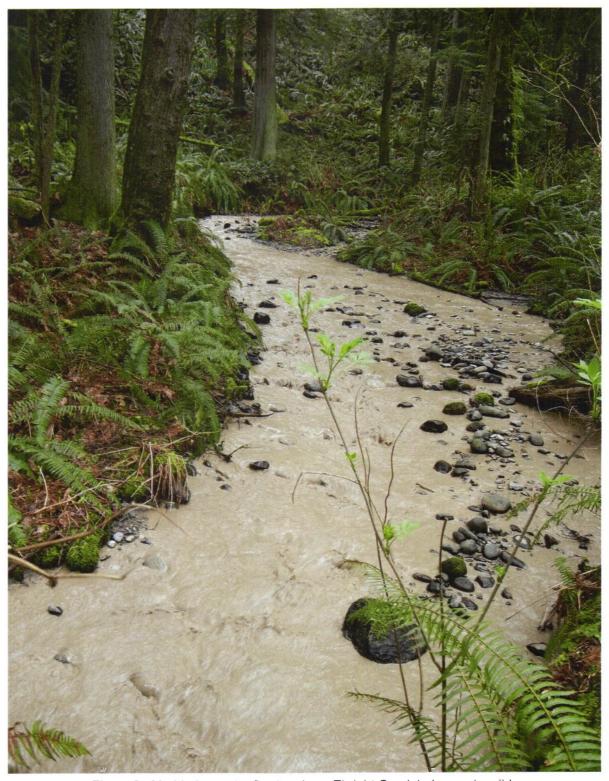


Figure 3: Mud-laden water flowing down Ebright Creek below major slide



Figure 4: 74 year-old blocking culvert on Ebright Creek



Figure 5: Construction work associated with removal of the old culvert and installation of a new culvert

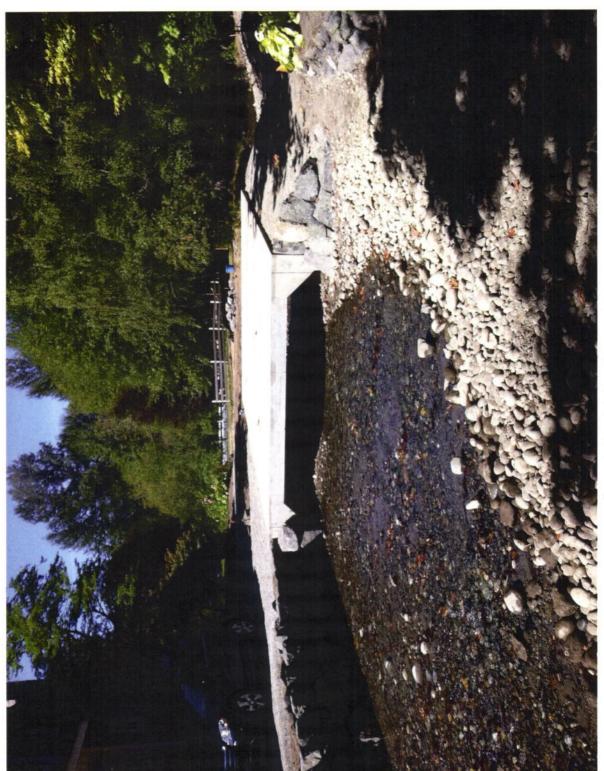


Figure 6: New fish-friendly box culvert

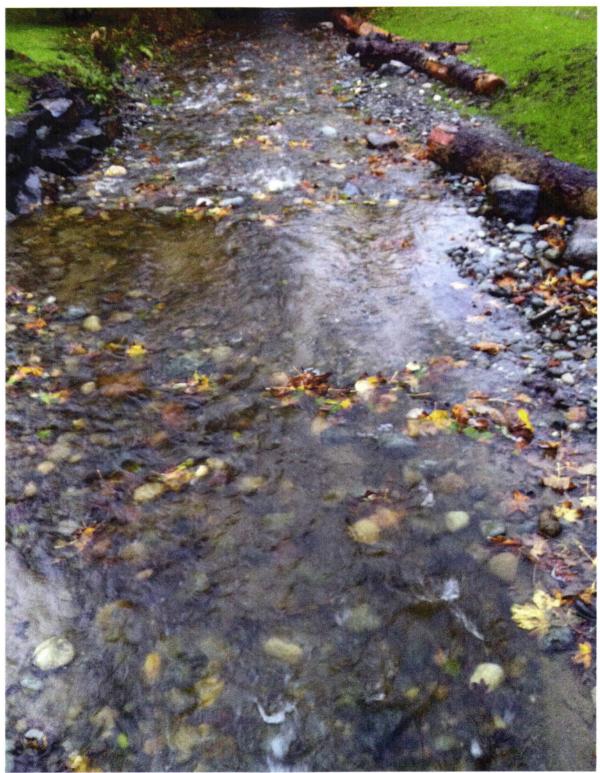


Figure 7: Rehabilitated area below the new box culvert



Figure 8: Portions of Ebright Creek utilized by spawning kokanee before (red) and after (blue) the culvert replacement